



*Presented By*  
**DESERT WATER**

*Annual*  
**WATER  
QUALITY  
REPORT**

*Reporting Year 2011*

PWS ID#: 3310005

## Meeting the Challenge

Water agencies across the State are facing numerous new pressures and challenges and will continue to do so in the years ahead. We at Desert Water Agency (DWA) are working diligently to protect the quality, affordability, and reliability of your water supply.

Water is a unique resource. Despite its being scarce, it is inexpensive. For less than \$0.007 a gallon, customers can rely on their tap, irrigation, fire protection, and recreation. However, as new regulations come upon us, costs will change. Legislatures and regulators are working to require higher levels of water quality testing and enhanced treatment of existing supplies, which will result in expensive new processes. At DWA, we are urging regulators to closely examine scientific evidence and research before setting new standards.

Additionally, as the economy struggles to recover, pressure continues to spend local ratepayer money outside the service area. The State continues to seek other sources of funding for programs it cannot afford. DWA is working diligently to protect local funds.

Changes are coming, and DWA is preparing to manage them with our customers' interests in mind. We take our customers' trust as a great responsibility.

Thank you,

David K. Luker

*General Manager and Chief Engineer*

## Source Water Description

Desert Water Agency is a public, nonprofit agency and State Water Contractor serving a 325-square-mile area including parts of Cathedral City, outlying county areas, Desert Hot Springs, and Palm Springs. An elected five-member board sets policy and represents the ratepayers.

The Whitewater River Subbasin provides groundwater in a continuous process. Mountain streams also bring water by way of Chino Creek, Snow Creek, and Falls Creek. Natural groundwater replenishment is supplemented with Colorado River water imported through the Colorado River Aqueduct to recharge basins near Windy Point and in Desert Hot Springs.

## Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

**Inorganic Contaminants**, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

**Pesticides and Herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

**Radioactive Contaminants**, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Your Elected Board of Directors

<i>President</i>	Patricia G. Oygur
<i>Vice President</i>	Thomas Kieley, III
<i>Secretary/Treasurer</i>	James Cioffi
<i>Director</i>	Craig A. Ewing
<i>Director</i>	Joseph K. Stuart

We invite you to attend our board meetings at 8 a.m. on the first and third Tuesdays of each month at 1200 Gene Autry Trail South, Palm Springs.

## Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Testing for *Cryptosporidium*

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates no presence of these organisms in our source water.

## Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources.

The sources of your water are considered vulnerable to activities normally associated with residential, commercial and industrial development. However, all water provided by Desert Water Agency meets all U.S. EPA and CDPH guidelines. To review the SWAP, please contact our office during regular business hours.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Beth Amheiser, Laboratory Director, at (760) 323-4971 ext. 169.

Chromium-6, a naturally occurring element in local groundwater, is being investigated by regulatory agencies. DWA is closely following and will participate whenever possible in the research developments related to this substance. We look forward to thorough research and studies that will help all of us learn what, if any, impact this substance could have on human health. DWA is always first and foremost concerned with providing our customers a safe, reliable drinking water supply.



## Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The State requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES											
				Distribution System		Groundwater Source		Surface Water Sources			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2011	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	0.22	ND–0.98	NA	NA	0.67	0.20–2.2	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2011	2.0	1	NA	NA	0.6	NA	0.14	ND–0.14	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2011	15	(0)	NA	NA	<3	ND–3.98	<3 <sup>1</sup>	<3 <sup>1</sup>	No	Erosion of natural deposits
Haloacetic Acids [HAAs] <sup>2</sup> (ppb)	2011	60	NA	9.4	ND–42.4	NA	NA	NA	NA	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2011	45	45	NA	NA	7.9	2.0–25	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] <sup>2</sup> (ppb)	2011	80	NA	15.8	ND–44.8	NA	NA	NA	NA	No	By-product of drinking water disinfection
Total Coliform Bacteria [Total Coliform Rule] (% positive samples)	2011	More than 5.0% of monthly samples are positive	(0)	0.8	ND–3.03%	NA	NA	NA	NA	No	Naturally present in the environment
Turbidity (NTU)	2011	TT	NA	0.12	ND–1.32	ND	NA	NA	NA	No	Soil runoff
Uranium (pCi/L) <sup>1</sup>	2011	20	0.43	NA	NA	9.9	7.6–13.6	11.5	NA	No	Erosion of natural deposits
Tap water samples were collected for lead and copper analyses from sample sites throughout the community											
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE				
Copper (ppm)	2009	1.3	0.3	0.18	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Lead (ppb)	2009	15	0.2	0	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits				

SECONDARY SUBSTANCES											
				Distribution System		Groundwater Source		Surface Water Sources			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2011	500	NS	NA	NA	31	NA	1.9	1.1–2.8	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2011	15	NS	0.1	ND–4.9	NA	NA	NA	NA	No	Naturally occurring organic materials
Odor–Threshold (Units)	2011	3	NS	NA	NA	1	NA	1	1–1	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2011	1,600	NS	NA	NA	570	NA	170	78–320	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2011	500	NS	NA	NA	100	NA	5.5	0.81–16	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2011	1,000	NS	NA	NA	350	NA	110	49–200	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2011	5	NS	NA	NA	NA	NA	0.4	0.3–0.6	No	Soil runoff

OTHER SUBSTANCES											
				Distribution System		Groundwater Source		Surface Water Sources			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aggressive Index	2009	Nonaggressive	None	NA	NA	12.5	12–13	10.84	10.65–11.19	No	Influenced by hydrogen, carbon, oxygen, and temperature
Alkalinity (ppm)	2011	None	None	NA	NA	130	NA	81	40–140	No	Function of carbonate, hydroxide, and bicarbonate; naturally occurring
Bicarbonate	2011	None	None	NA	NA	160	NA	100	49–170	No	Naturally occurring
Calcium	2011	None	None	NA	NA	70	NA	26	11–48	No	Contributes to water hardness; naturally occurring
Hardness (ppm)	2011	None	None	NA	NA	230	NA	68	26–130	No	Naturally occurring
MBAS	2011	0.5	None	NA	NA	0.11	NA	ND	ND	No	NA
Magnesium	2011	None	None	NA	NA	14	NA	3.6	ND–4.5	No	Contributes to water hardness; naturally occurring
Potassium	2011	None	None	NA	NA	3.6	NA	3.6	1.6–6.2	No	Leaching from water softeners, fertilizers, and natural deposits
pH	2011	None	None	7.9	7.0–8.4	7.9	NA	7.6	7.3–7.9	No	Naturally occurring

UNREGULATED SUBSTANCES						
		Groundwater Source		Surface Water Sources		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2011	26	NA	8.5	4.7–13	Erosion of natural deposits
Vanadium (ppb)	2011	8.1	NA	0.85	ND–3.4	Erosion of natural deposits

<sup>1</sup> Sampled in 2010

<sup>2</sup> We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated concentrations of disinfection by-products. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.

## Definitions

---

**AL (Regulatory Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

**NS:** No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

**PHG (Public Health Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.